

Claims

1. A method for drawing in at least one paper web (05, 06, 07, 137, 138, 139, 142) via a longitudinal folding hopper (18) of a rotary printing press, characterized in that several paper webs (05, 06, 07, 137, 138, 139, 142) are connected in an interlocked, material contact, or frictional manner and are fastened to a common draw-in means (33, 34, 87, 124).

2. The method in accordance with claim 1, characterized in that the paper webs (05, 06, 07, 137, 138, 139, 142) are exclusively connected with each other during the draw-in process and are not connected with each other during production.

3. The method in accordance with claim 1, characterized in that a plurality of starts of paper webs (07, 06, 05, 138, 139, 141, 142) to be drawn in are connected with each other, or starts of paper webs (07, 06, 05, 138, 139, 141, 142) to be drawn in and already drawn-in paper webs (07, 06, 05, 138, 139, 141, 142) are connected with each other into a train (140), that the train (140) formed in this way is subsequently fed into the longitudinal folding hopper (18).

4. The method in accordance with claim 1, characterized in that an application of an adhesive or of glue is used for the connection by material contact.

5. The method in accordance with claim 1, characterized in that the connection by material contact is performed by means of so-called parchmentizing.

6. The method in accordance with claim 1, characterized in that one or several paper webs to be drawn in are moved by themselves or together with one or several already drawn-in paper webs (05, 06, 07, 137, 138, 139, 142), which are placed on top of each other and are in contact, during the draw-in process through a d.c. voltage high tension field and are each provided with an electrical charge on the interior and finally adhere to each other and form a locked-together train (140).

7. A device for drawing in at least one paper web (05, 06, 07, 137, 138, 139, 142) via a longitudinal folding hopper (18) of a rotary printing press, characterized in that the device is arranged upstream of the longitudinal folding hopper (18) to connect a plurality of paper webs (05, 06, 07, 137, 138, 139, 142), and a common draw-in means (33, 34, 87, 124) is arranged for conducting the connected paper webs (05, 06, 07, 137, 138, 139, 142) via the longitudinal folding hopper (18).

8. The device in accordance with claim 7, characterized in that an adhesive or glue application device (188 to 194, 196, 197) is provided for the connection by material contact (locking together) of several paper webs (05, 06, 07, 137, 138, 139, 141, 142) placed on top of each other.

9. The device in accordance with claim 8, characterized in that the adhesive or glue application device (188 to 194, 196, 197) creates a transverse or a longitudinal glue application.

10. The device in accordance with claim 7, characterized in that a beading device (160) is provided for the connection by

material contact (locking together) of several paper webs (05, 06, 07, 137, 138, 139, 141, 142) placed on top of each other.

11. The device in accordance with claim 7, characterized in that a stapling device (206, 198, 178) is provided for the interlocked connection (locking together) of several paper webs (07, 06, 05, 138, 139, 141, 142) placed on top of each other to form a train (140).

12. The device in accordance with claim 11, characterized in that the stapling device is a tongue-stitching device (206).

13. The device in accordance with claim 11, characterized in that the stapling device is a staple-clipping device (198).

14. The device in accordance with claim 11, characterized in that the stapling device is a thread-sealing device (178).

15. The device in accordance with claim 7, characterized in that, viewed in the running direction of the paper web, positive charge electrodes (145) and negative charge electrodes (150), which are spaced apart from each other and extend upstream of or in the area of the plane extending transversely to the paper web, or to the train running direction between two hopper flanks (22, 23) of a longitudinal folding device (18, 22, 23, 24, 26, 32), are provided, that a movement path of the paper webs (05, 06, 07, 137, 138, 139, 142), is provided between the two charge electrodes (145, 150), that the positive (145) and negative charge electrodes (150) are connected with a high-tension d.c. voltage source (149, 151, 152).

16. The device in accordance with claim 15, characterized in that at least one of the charge electrodes (145, 150) is rotatably arranged in machine frames (113, 114).

17. The device in accordance with claim 15, characterized in that the charge electrodes (145, 150) are arranged electrically insulated against the machine frames (113, 114) receiving them.

18. The device in accordance with claim 15, characterized in that an insertion roller (16) is placed upstream of the longitudinal folding device (18), that the insertion roller (16) is arranged rotatably around and electrically insulated against the machine frames (113, 114).

19. The device in accordance with claim 15, characterized in that a longitudinal folding hopper (22, 23, 24) is arranged electrically insulated against the machine frames (113, 114) receiving it.

20. The device in accordance with claim 15, characterized in that two hopper folding rollers (26, 27) are provided, which are electrically insulated against the machine frames (31, 32).

21. The device in accordance with claim 15, characterized in that the folding device (18, 26, 27) has at least two hopper flanks (22, 23) and a paper deflection device (165, 155, 61, 62) extending around them in a shell-like manner, that the paper deflection device (165, 155, 61, 62) is arranged electrically insulated against a machine frame and the longitudinal folding hopper (18, 41, 22, 23).

22. The device in accordance with claim 21, characterized in that a longitudinal folding hopper (18, 41, 22, 23) and a paper deflection device (165, 155, 61, 62) are connected to different polarities (\ominus , \oplus) of a high-tension d.c. voltage source (149).

23. The device in accordance with claim 22, characterized in that the longitudinal folding hopper (18) has a hopper projection (24).

24. The device in accordance with claim 15, characterized in that the folding device (18, 26, 27) has two rotatably arranged hopper folding rollers (26, 27), that the hopper folding rollers (26, 27) are seated electrically insulated against the machine frame.

25. The device in accordance with claim 7, characterized in that the folding device (18, 26, 27) has at least two hopper flanks (22, 23) and a paper deflection device (165, 155, 61, 62) extending around them in a shell-like manner, that the paper deflection device (165, 155, 61, 62) is entirely or partially connected with one or several vibrators or beaters (277).

26. The device in accordance with claim 25, characterized in that low-frequency or higher-frequency vibrators or beaters (277) are provided.

27. The device in accordance with claim 25, characterized in that the paper deflection device (165, 155, 61, 62), or portions thereof, are fastened via rocker elements (276) on a machine frame (118).

28. The device in accordance with claim 25, characterized in that electro-starter vibrators, or compressed air turbo-vibrators, or compressed air ball vibrators, or compressed air roller vibrators, or compressed air turbine vibrators, or flyweight vibrators with a pneumatic and hydraulic motor drive, or compressed air piston vibrators or compressed air interval beaters are provided.

29. The device in accordance with claim 7, characterized in that the folding device (18, 26, 27) has two hopper flanks enclosing an acute angle, with flexible draw-in means (33, 34, 124) which can be moved along guides (80, 88, 89, 96) and two rotatable hopper folding rollers (26, 27), that the draw-in means (33, 34, 124) are finite and are provided with a device (35) for holding the starts of paper webs, paper webs (05, 06, 07, 137, 138, 139, 142), starts of paper web trains (140) or the trains (140) themselves, that a movement path of the draw-in means (33, 34, 124) is provided between hopper folding rollers (26, 27).

30. The device in accordance with claim 29, characterized in that the hopper folding rollers (26, 27) are arranged so they can be placed at selective distances from each other.

31. The device in accordance with claim 29, characterized in that a first portion of a rail-like guide (80, 88, 89), which terminates at the latest in the insertion gap of the two hopper folding rollers (26, 27), is provided along the intended movement path, that a second portion of a rail-like guide (80, 88, 89) is provided, which starts at the earliest in the outlet gap of the two hopper folding rollers (26, 27).

32. The device in accordance with claim 29, characterized in that at least one end of the first portion of the rail-like guide (80, 88, 89) directed toward the hopper insertion roller (26, 27) is arranged so that it can be brought into and out of the intended movement path.

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